of Asia Minor, from the periods of the sixth and twelfth dynasties down to the reign of Rameses III., *i.e.* for a space of more than 2000 years. The great value of his paper to Greek archæologists consists in the fact that he derives his materials from the Egyptian monuments alone, and he has shown pretty conclusively from the Egyptian records that the Mycenæans, or "Minoans," of Crete were in close communication with Egypt as early as the time of the eighteenth dynasty, about B.C. 1650 to B.C. 1400, and probably much earlier. We may note in passing a point of interest, namely, his identification of the true name of the Island of Cyprus in the time of Thothmes III., viz. Yantanay, which is undoubtedly the same as the Assyrian name for the island, "Yatnana." Mr. Hall also gives new material to the student of Mycenæan art in his identifications of Cretan vases among the tribute depicted on the walls of the tombs at Thebes, about B.C. 1550. The rest of his paper is occupied with an account of the relations of the Egyptians with the Mediterranean tribes who successively invaded Egypt under the nineteenth and twentieth dynasties. He proves that the period of peaceful relations between Crete and Egypt under the eighteenth dynasty was the period of the Minoan civilisation of Knossos and Phæstus, and that the post-Minoan, or true Mycenæan, period in Greece was the time when the peaceful relations of Cretan civilisation with Egypt had come to an end, and, in the author's words, "in the days of the degenerate Ramessids of Egypt, its place had been taken by wandering tribes, amid whose internecine struggles the older civilisation of Greece slowly degenerated and finally passed away.

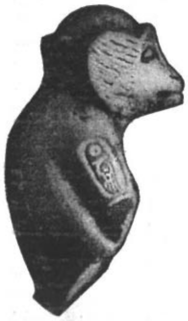
FIG. 2.—Upper Part and Head of a Model of an Ape found at Mycenæ.

The excavations which have been carried on by the British School itself at Palaikastro, at the eastern end of Crete, are described by Mr. R. C. Bosanquet, the present director of the school. He has found there the remains of a palace and houses, some remarkable interments in painted terra-cotta coffins, and a great quantity of pottery of the pre-Mycenæan or Kamares type. We understand that Mr. Bosanquet's excavations this year have been even more productive than those of last year, and his exploration of the Eteokretan country has given us much new information about this remote but interesting portion of the island. Two or three years ago Mr. Bosanquet discovered on the site of Præsus, the ancient capital of the Eteokretans, another example of an inscription in the non-Greek language of eastern Crete. This is critically examined by Mr. R. S. Conway in this number of the Annual, but we think that his attempt to prove that the language is Indo-European is unsuccessful. Kretschmer has shown that the languages of southern Asia Minor, of which Lycian is the best known example, were not Indo-European, and legend connects the Eteokretans with Lycia. Of the Lycian language Mr. Conway naïvely admits (p. 156, note 2) that he has no knowledge, but yet criticises Kretschmer! The remaining article in the volume, which is by Mr. Marcus N. Tod, is of interest to classical scholars only. The above remarks are sufficient to indicate the interest and importance of the new volume of the British School at Athens.

## THE MARQUIS OF SALISBURY.

THE death of Lord Salisbury has robbed us of a great statesman. He had been ill for some weeks and the peaceful end came during the evening of Saturday last. At the beginning of June of this year an attack of nephritis, complicated with a weakness of the heart, set in, and from this illness Lord Salisbury never recovered. Since the preceding Wednesday, when his heart began to fail, it was generally known that there was no hope, and the quiet, painless passing came as a fitting conclusion to a distinguished career, marked always as it was by a dignified reserve and an unusual love for seclusion.

Born in Hatfield on February 3, 1830, Lord Salisbury died in his seventy-fourth year. He was the direct lineal descendant of the great Lord Burleigh, and was educated at Eton and Christ Church, Oxford, where he graduated in 1850. The few years following his stay at Oxford were spent in travel, and included a somewhat prolonged visit to Australia and New Zealand. During this period he learnt from personal experience the dangers and charms of life at cattle stations and at the gold diggings. Returning in 1853, he was elected to an All Souls Fellowship, but as subsequent events showed he preferred the activity of politics to the quietude of university life. In the autumn of the same year he entered the House of Commons as Conservative member for Stamford, and for fifteen years he continued to represent this constituency, until, in 1868, on the death of his father, he took his seat in the House of Lords as Marquis of Salisbury.

It is unnecessary, even if it were appropriate, to give in these columns an account of the numerous incidents in the political career of this renowned statesman. The barest catalogue of the important offices of State occupied by him with consummate ability serves adequately to indicate how intimately his life has been intertwined with the history of the Empire during the latter half of the nineteenth century, and how large a part the dead statesman has taken in the government of the nation. He was twice Secretary for India and President of the Indian Council. In 1876 he was special Ambassador to the historic conference at Constantinople; and in 1878 Plenipotentiary at the celebrated Berlin Conference. Four times he was the Secretary of State for Foreign Affairs, and in this capacity more than any other, perhaps, he inspired the complete confidence of his countrymen. In 1886 he was First Lord of the Treasury, and three times he was called upon by his Sovereign to form a Cabinet. His premierships lasted respectively from 1885–6, 1886–1892, and 1895–1902.

But an account of Lord Salisbury's political career gives no proper idea of the versatility of his genius. When a member of the House of Commons he was actively engaged in journalistic work, and his contributions to the *Saturday Review*, the *Quarterly Review*, and other papers would have secured for a less gifted person a sufficiently high reputation. To men of science, however, the most interesting recollection in connection with Lord Salisbury is the fact that in 1894 he was President of the British Association, and that throughout his political triumphs his great pleasure was, in his leisure hours at Hatfield, to pursue scientific researches in physics and chemistry.

In commenting on the Presidential Address delivered by Lord Salisbury at Oxford in our issue for August 9, 1894, we remarked:—"Many of those who know Lord Salisbury only as a politician and as Minister for Foreign Affairs will be surprised at the wide range of thought and reading displayed in his

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handling of the diverse topics which he passes under review." And though Lord Salisbury himself said in that address, "In presence of the high priests of science I am only a layman, and all the skill of all the chemists the Association contains will not transmute a layman into any more precious kind of metal," yet on that occasion he proceeded to give in a masterly fashion "a survey not of our science but of our ignorance." The references to the want of knowledge of the nature of the capricious differences which separate the atoms from each other; the description of the ether as "'a half-discovered entity"; the explanation of the deep obscurity which at the time of the address still enveloped the origin of the infinite variety of life, and the impossibility of demonstrating the process of natural selection in detail, combined to make the Oxford British Association address comparable in importance with the great controversy at the same city when the Association met there thirty-four years previously.

The study of science was for many years the solace which Lord Salisbury sought from the cares of State, and it is far from fanciful to suppose that these investigations influenced his political outlook and contributed to his success in meeting the difficulties of government. But whether this is so or not, there can be no doubt that Lord Salisbury's acquaintance with physical and chemical science was of an intimate nature, and added greatly to the joy and comfort of the short years of his retirement.

Lord Salisbury held many other appointments and received numerous academic distinctions. Among these may be mentioned that from 1869 to the time of his death he was Chancellor of the University of Oxford, and his interest in higher education was also shown by the fact of his being a member of the Council of King's College, London. He was a Doctor of Civil Law of Oxford, and a Doctor of Laws of Cambridge University, as well as a Fellow of the Royal Society.

This brief notice of a great career may be fittingly closed with a paragraph from Dr. Traill's monograph. "Lord Salisbury's record is that of an English statesman who, while directing the affairs of his country abroad with singular skill and judgment, has also guided its domestic policy in the paths of wisdom and equity, and, though loyally submitting to the 'will of the majority' in all things lawful, has held it his first duty to maintain the just rights of every class, however small a minority it may constitute, in the State."

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## PROF. LUIGI CREMONA.

AN interesting account of the life and work of the late Prof. Cremona, by Prof. Blaserna, appears in the *Proceedings* of the Royal Society of Edinburgh (vol. xxiv.), an advance copy of which has been received. By permission of the general secretary of the Society, we print a free translation of Prof. Blaserna's contribution and extracts from a note appended to it.

Prof. Luigi Cremona was born at Pavia on December 7, 1830, and studied there until the year 1848, when he suspended his academic work to join the ranks of the Italian volunteers, and to take part in the heroic defence of Venice until the capitulation of that famous town. He then graduated in mathematics at Pavia, where he had among his teachers Francesco Brioschi, and among his fellow-students Eugenio Beltrami and Felice Casarati. Thereafter he taught in the Gymnasium at Cremona and in the Beccarian Lyceum at Milan.

In 1860 he was appointed to the new chair of higher geometry in the University of Bologna, then reorganised by the Italian Government, and thence he passed, in 1866, to the Polytechnic at Milan. When, after the year 1870, the Italian Government undertook the organisation of the great University of Rome, with its annexed engineering school, Cremona was called, in 1873, to be professor of higher geometry in the university and director of the engineering school, which he reconstructed and established in the old Convent of St. Pietro in Vincoli. The duties of this double post he discharged with fidelity and distinction to the last years of his life.

Although Cremona had been a pupil of Brioschi, an eminent analyst, his predilection was always for geometry, in which he may be said to have created a classical school. His numerous publications refer chiefly to the theory of algebraic curves and surfaces. All the problems that arose in this department of mathematics between 1860 and 1880 attracted his attention, and everywhere he left an indelible trace of the depth and the clearness which characterised his genius.

To general theory are dedicated the "Introduction to a Geometrical Theory of Plane Curves" (1862) and "Preliminaries to a Theory of Surfaces" (1866), two monographs in which he expounds, with originality of view and wonderful unity of method, results partly known and partly new. He demonstrated the fruitfulness of the theorems contained in the second of these memoirs by applying them to the study of surfaces of the third order, in the "Mémoire de Géometrie pure sur les Surfaces du troisième Ordre," which gained in 1886 the Steiner prize of the Academy of Berlin, and which will remain for all time a classic model of geometric research.

But the originality of Cremona appears still more distinctly in his study of the transformations to which his name is now attached. Already in the first half of the nineteenth century a theory had arisen of the projective transformations which change the points and straight lines of one plane into the points and straight lines of another plane, and side by side with these had also been examined the correspondences which transform straight lines into circles or conics. But the idea of treating from a more general point of view the transformations which change straight lines into algebraic curves of any order *n* whatever belongs to Cremona, who established the basis of this theory in two memoirs (1863-65), and afterwards extended it to space of three dimensions (1871-72), thus opening to geometers a vast field of research, which has not been exhausted at the present day.

While, by these works, of which I have mentioned only the most extensive, and by his splendid lectures, Cremona was firing the rising generation with the love of pure science, and thus exercising a great influence on original geometric research in Italy during the last thirty years, on the other hand he was never weary of showing his interest in the technical applications of mathematics. His little work on "Reciprocal Figures in Graphical Statics" is a beautiful example of this interpenetration of pure and applied science, an interpenetration which characterises another side of his broad genius. Always pursuing this order of ideas, he took assiduous care with his engineering students in Rome to keep science and practice side by side, inciting them to attain that just balance of different faculties of which he gave himself so fine an example.

Besides all this, Luigi Cremona was a statesman. Nominated a Senator of the kingdom in 1879, he took an active part in all the work of the Senate. He was, indeed, one of the most respected and influential of the

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